



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,981	12/06/2002	Eugene Olczak	040849-0264	4517
22428	7590	03/09/2005	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			LEE, GUIYOUNG	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/065,981	Applicant(s) OLCZAK, EUGENE	
	Examiner Guiyoung Lee	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-15 and 17-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4-7, 15, 18, 19 and 21-23 is/are allowed.
- 6) ☒ Claim(s) 8,9,13 and 20 is/are rejected.
- 7) ☒ Claim(s) 10-12,14,17,20,24 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Prelim./Amdt.

1. Receipt is acknowledged of the Amendment filed 12/23/2004.
2. The drawings were received on 12/23/2004. These drawings are approved. Therefore, Examiner's drawing objections are withdrawn.
3. In light of the amendment to the claims, Applicant's clarification and arguments, the Examiner's claims rejections under the second paragraph of 35 U.S.C. 112 are withdrawn.
4. Applicant cancelled claims 2-3, 16 and 26-29.
5. Claims 1, 4-15 and 17-25 are pending.

Claim Objections

6. Claim 17 is objected to because of the following informalities: Claim 17 depends on the cancelled claim 16. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 8-9 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Higuchi et al. (US 5,914,759).

Re claims 8-9: Higuchi discloses a backlight display device comprising an optical source for generating light; a light guide (1 in Fig. 16) for guiding the light therealong including a reflective

Art Unit: 2875

device (3) positioned along the light guide for reflecting the light out of the light guide; an optical substrate (4'') receptive of the light from the reflective device, the optical substrate comprising a first surface (down surface of 4'') and a second surface (upper surface of 4'') opposing the first surface the first surface arranged closer to the light guide (1) than the second surfaces the second surface comprising a prism structure characterized by a cross section having a curved facet (See the curved facet in the upper surface of 4'').

Re claim 20: Higuchi discloses the prism structure is an ultraviolet curable organic or inorganic material (Table 1 and Table 2 in Col. 17).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi et al. (5,914,759) as applied to claim 8 above, and further in view of Kojima et al. (US 5,797,668).

Re claim 13: Higuchi does not disclose the optical substrate having an index of refraction between 1.65 and 1.8. Kojima teaches an optical substrate having a refraction index of 1.7 (See Table 1 in col. 7). It would have been obvious to one having ordinary skill in the art at the time of the invention to substitute Higuchi's optical substrate with an optical substrate having a refraction index of 1.7 as taught by Kojima in order to increase brightness or luminance of the light viewed by the user of the display.

Allowable Subject Matter

11. Claims 1, 4-7, 15, 18-19 and 21-23 are allowed.
12. Claims 10-12, 14, 17, 20 and 24-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: With regard to claims 1, 4-5, 10, 14, 18, 22-25, the prior art of record does not disclose the claimed optical substrate having a prism structure characterized by a cross section having a curved facet described by the equation as set forth in the claims. With regard to claims 6-7, 11-12, 15, 17, 19 and 21, the prior art of record does not disclose an optical substrate comprising a surface prism structure having a peak angle of greater than 90 degrees and less than 105 degrees and a refractive index of between approximately 1.65 and 1.8.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guiyoung Lee whose telephone number is 571-272-2374. The examiner can normally be reached on M-F.

Art Unit: 2875

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LGY


Stephen Husar
Primary Examiner